Appl. No. 10/003,697 Amdt. Dated October 28, 2004 Reply to Office Action of July 28, 2004

## **REMARKS**

Favorable reconsideration and allowance of the present application are respectfully requested in view of the foregoing amendments and the following remarks.

Currently, new claims 31-60 are pending in this application, including independent claims 31, 43, 52, and 58-59. Claims 1-30 have been cancelled in this paper.

Independent claim 31, for instance, is directed to a heat transfer material that comprises a non-transferable portion and a transferable portion. The non-transferable portion comprises a substrate layer and a release coating layer. The transferable portion overlies the non-transferable portion, and the transferable portion comprises a peelable film layer overlying the release coating layer and an opaque crosslinked polymer layer overlying the peelable film layer.

In the Office Action, claims 1-30 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-32 of copending Application Serial No. 10/003,698. Without commenting on the propriety of this rejection, Applicant is submitting herewith a Terminal Disclaimer with respect to the 10/003,698 Application, pursuant to 37 C.F.R. § 1.321(c).

Additionally, claims 1-30 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 21-40 of copending Application Serial No. 09/614,829. The Office Action simply stated that "[c]laims 1-30 are included in claims 21-40 of 09/614,829." Applicant respectfully submits, however, that claims 31-60 of the present application would not be obvious in view of claims 21-40 of the '829 Application. Thus, Applicant respectfully traverses the obviousness-type double patenting rejection of the present claims based on claims 21-40 of Application Serial No. 09/614,829.

Also, at page 3, the Examiner objected to original claim 18. Applicant respectfully submits that new claim 48 properly refers back to the "crosslinked polymer layer having an opacifying material" of new independent claim 43.

The original independent claims in this application were claims 1, 13, 22, and 28-29. In the Office Action, independent claims 1, 13, 28, and 29 were rejected under 35

U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,358,660 to <u>Agler, et al.</u> in view of U.S. Patent No. 6,551,692 to <u>Dalvey, et al.</u> Additionally, independent claim 22 was rejected under 35 U.S.C. § 103(a) as being unpatentable over <u>Agler, et al.</u> in view of <u>Dalvey, et al.</u> and further in view of U.S. Patent No. 4,167,414 to <u>Morgan</u>. Applicant respectfully submits that claims 31-60 patentably define over the cited references.

Agler, et al. is directed to a coated transfer sheet comprising a substrate, coated with a barrier layer, onto which is coated a release layer, and onto which is coated an optional image receiving layer. (See Figure 1). The barrier layer is a thermosetting and/or UV curable polymeric coating that separates the release layer from the substrate and that remains with the substrate after transfer of the release layer and the optional image receiving layer. (Col. 6, lines 14-31). The release layer may comprise a polymeric composition that comprises an acrylic dispersion, an elastomeric emulsion, a polyurethane dispersion, and polyethylene glycol. (Col. 2, lines 45-57). The release layer of Agler, et al. transfers with the image from the substrate/barrier to the desired receptor. (Col. 14, lines 13-35). Thus, in the methods described by Agler, et al., its printed, coated transfer sheet is placed image side against a receptor (i.e., a tee shirt), and heat and pressure are applied to the non-image side of the substrate to transfer the release layer(s) and the optional image receiving layer(s) to the receptor. (Col. 3, lines 56-63).

Agler, et al. fails to disclose various limitations of Applicant's independent claims, as recognized in the Office Action. For instance, with regard to claims 31, 43, and 58, Agler, et al. fails to disclose or suggest a heat transfer material having a *transferable portion* that comprises a peelable film layer and a crosslinked polymer layer that is opaque (or contains an opacifying material) overlying the peelable film layer. For example, when Agler, et al. mentions "whiteners" in column 10, this is only in conjunction with its barrier layer, a layer that *remains* with Agler, et al.'s substrate after transfer and therefore *does not transfer*.

<u>Dalvey, et al.</u> does not remedy any of the above-described deficiencies of <u>Agler, et al.</u> when compared to Applicant's pending claims. <u>Dalvey, et al.</u> is directed to an image transfer sheet that is comprised of a substrate layer, a release layer, and an

image-imparting layer that comprises a polymeric component such as a low density polyethylene. (Col. 2, lines 21-35). The image transfer sheet of <u>Dalvey</u>, et al. transfers an image to an image-receiving substrate (such as cloth) when the image transfer sheet is contacted to the image-receiving substrate at the polymeric component of the image-imparting layer and when heat is applied to the substrate layer of the image transfer sheet. (Col. 2, lines 35-45).

However, <u>Dalvey</u>, <u>et al.</u> does not describe or suggest a heat transfer material having a transferable portion that comprises a peelable film layer and a crosslinked polymer layer overlying the peelable film layer, as required by all of Applicant's claims. Generally, <u>Dalvey</u>, <u>et al.</u> does not disclose any sort of *crosslinked* polymer layer, and, with respect to claims like Applicant's independent claims 31, 43, and 58, <u>Dalvey</u>, <u>et al.</u> does not disclose or suggest a crosslinked polymer layer that is *opaque* (or contains an *opacifying material*). Therefore, Applicant respectfully submits that independent claims 31, 43, 52, and 58-59 patentably define over <u>Agler</u>, <u>et al.</u> and <u>Dalvey</u>, <u>et al.</u>, alone or in combination.

Moreover, the <u>Morgan</u> reference, discussed at page 8 of the Office Action, does not remedy any of the above-described deficiencies with respect to <u>Agler, et al.</u> and <u>Dalvey, et al.</u> when compared to Applicant's current claims. <u>Morgan</u> is directed to an opaque polyester film base for use as a substitute for paper supports previously used in photographic silver halide emulsion films. In <u>Morgan</u>, a polyester film base is energy-treated and then coated sequentially with (1) a white reflective layer comprising titanium dioxide, a polyfunctional aziridine, and an acrylic binder which is crosslinked to the functional groups in the energy-treated base by the aziridine, (2) an intermediate substratum containing gelatin; and (3) a photosensitive gelatino-silver halide diffusion transfer emulsion layer. <u>Morgan</u> states that its "invention resides in the improved anchorage contributed by the aziridine acting as a cross-linking agent between the film base and the opaque reflective layer." (Col. 1, lines 53-65).

Generally, one having ordinary skill in the art pertaining to Applicant's invention would have no motivation to combine <u>Morgan</u> with <u>Agler, et al.</u> and <u>Dalvey, et al.</u> and arrive at Applicant's claimed heat transfer materials and methods. <u>Morgan</u> is not

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directed to a heat transfer material at all, but is related to photographic film, more specifically, photographic diffusion transfer film that is used in instant cameras. (Col. 1, lines 7-12). Additionally, even if Morgan is combined with Agler, et al. and Dalvey, et al., this combination fails to disclose or suggest Applicant's claimed heat transfer materials and methods, wherein the heat transfer material has at least the following construction: a non-transferable portion comprising a substrate layer and a release coating layer; and a transferable portion comprising a peelable film layer overlying the release coating layer and a crosslinked polymer layer overlying the peelable film layer. Accordingly, for at least the reasons set forth above, Applicant respectfully submits that independent claims 31, 43, 52, and 58-59 patentably define over the cited references.

The above-cited references were also used to reject original dependent claims 2-12, 14-21, 23-27, and 30. Applicant respectfully submits, however, that at least for the reasons indicated above relating to the independent claims, new dependent claims 32-42, 44-51, 53-57, and 60 patentably define over the cited references. However, Applicant also notes that the patentability of dependent claims 32-42, 44-51, 53-57, and 60 does not necessarily hinge on the patentability of the independent claims. In particular, some or all of the dependent claims may possess features that are independently patentable, regardless of the patentability of the independent claims.

In summary, Applicant respectfully submits that the present application is in complete condition for allowance and favorable action, therefore, is respectfully requested. Examiner Dicus is invited and encouraged to telephone the undersigned, however, should any issues remain after consideration of this Amendment.

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Please charge any additional fees required by this Amendment to Deposit Account No. 04-1403.

Respectfully requested,
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